

ABSTRACT OF THE DISCLOSURE

5 An A.C. powered smoke detector with
supervision circuit for back-up battery. The
circuit periodically and automatically, checks the
power capacity of the back-up battery by momentarily
10 disabling the D.C. power supply from applying D.C.
voltage on a D.C. voltage bus while simultaneously
applying a test load to the battery. If the test
load voltage is too low, a low battery power
15 capacity indication is provided. In one embodiment,
the D.C. power supply is disabled by electrically
disconnecting it from the battery. In another
embodiment, a switch applies to effectively by pass
the D.C. power supply and enable the application of
the test load.